

60 Polygon Images (an alternative to 60-second Images)

Each n value is a factor of 60 and the number of rotating polygons in the first cycle is $60/n$ so each image has 60-gons.

Links to the images: [Triangles](#) [Alternate \$\Delta\$](#) [Pentagons \(5-gons\)](#) [Alternate \(Pentagams\)](#)

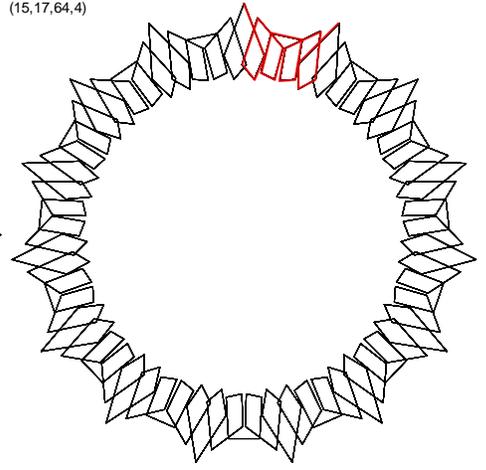
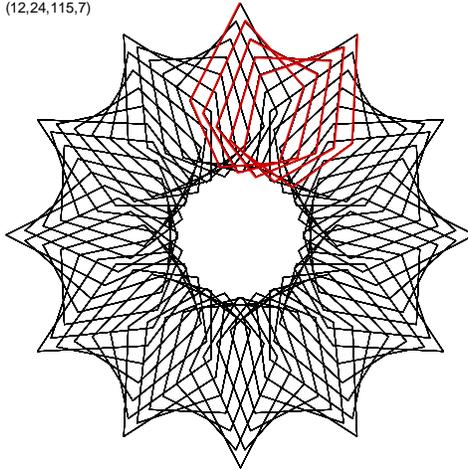
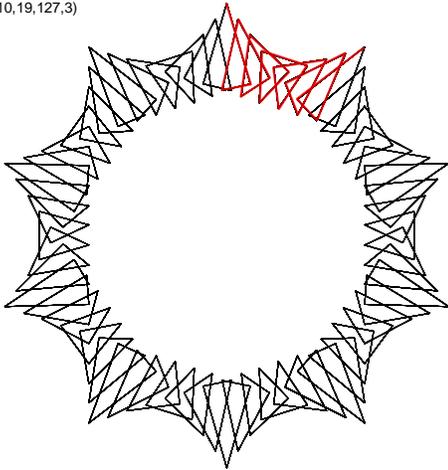
[Quadrangles](#)

(n, S, P, J)
(10,19,127,3)

190 lines (n, S, P, J)
(12,24,115,7)

288 lines (n, S, P, J)
(15,17,64,4)

255 lines



Links to the images:

[7-gons](#)

[7-grams](#)

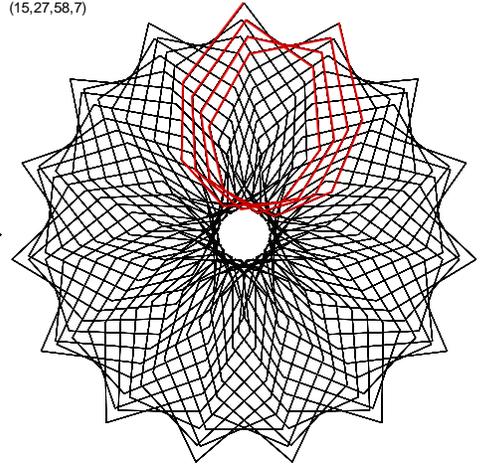
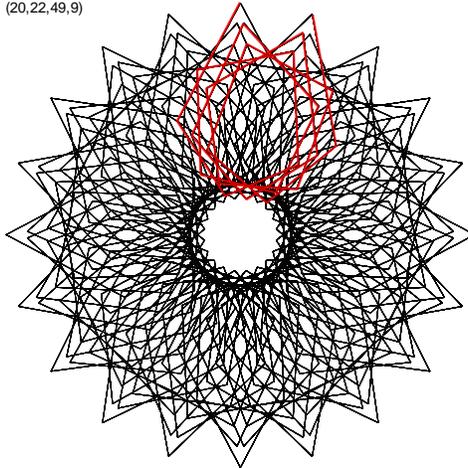
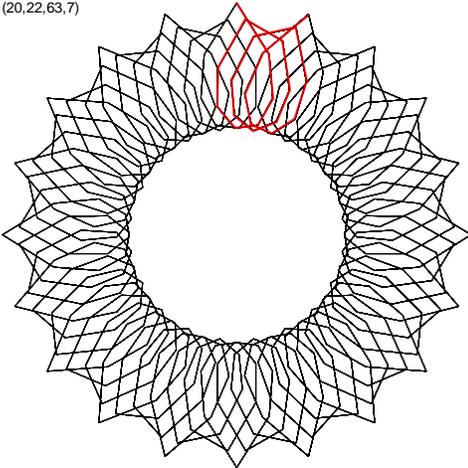
[7-gons](#)

(n, S, P, J)
(20,22,63,7)

440 lines (n, S, P, J)
(20,22,49,9)

440 lines (n, S, P, J)
(15,27,58,7)

405 lines



Links to the images:

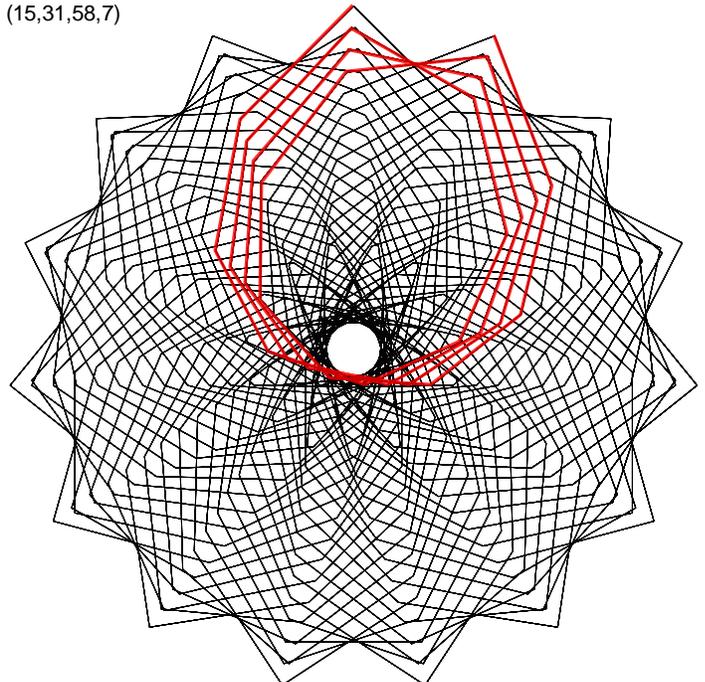
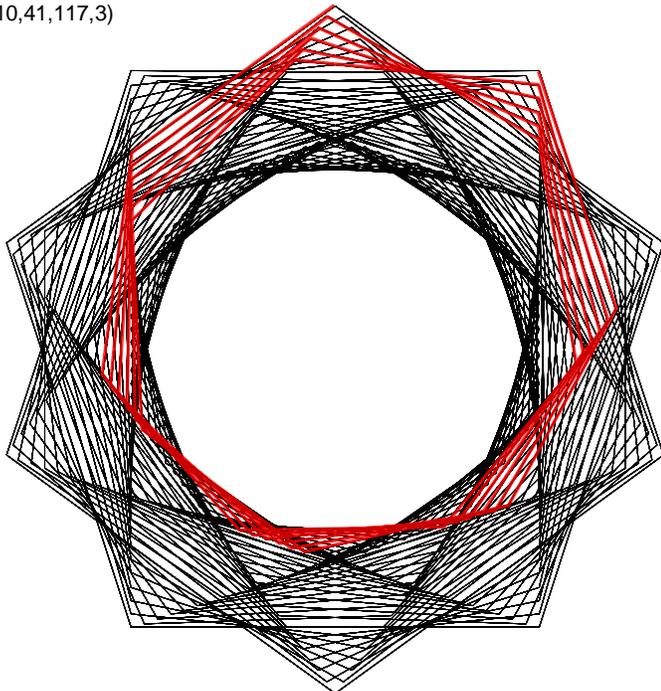
[7-gons](#)

[Octagons \(8-gons\)](#)

(n, S, P, J)
(10,41,117,3)

410 lines (n, S, P, J)
(15,31,58,7)

465 lines



The images on the previous page and below are based on rules discussed in the **Polygons and Stars in a Cycle** explainer but are inspired by the 60-second images analyzed in **The Ticking Clock** at the end of **File 2**. In each instance P and J are $\text{MMI MOD } n$, $1 = P \cdot J \text{ MOD } n$, so that each image is created in a “one-time around” fashion, just like discussed there. The only difference is these clocks use factors of 60 rather than 60 to accomplish the task.

The images below might be called *half second images* as a full time around involves 120 rather than 60 gons or grams! This allows $n = 24$ to create images as well (note the 5 small pentagrams in A below, $24 \cdot 5 = 120$). As with the rest of these images, they are most enjoyably viewed by clicking the web link then clicking *Toggle Drawing*.

[Link to A \(5-gons\)](#)

[Alternative to A \(7-gons\)](#)

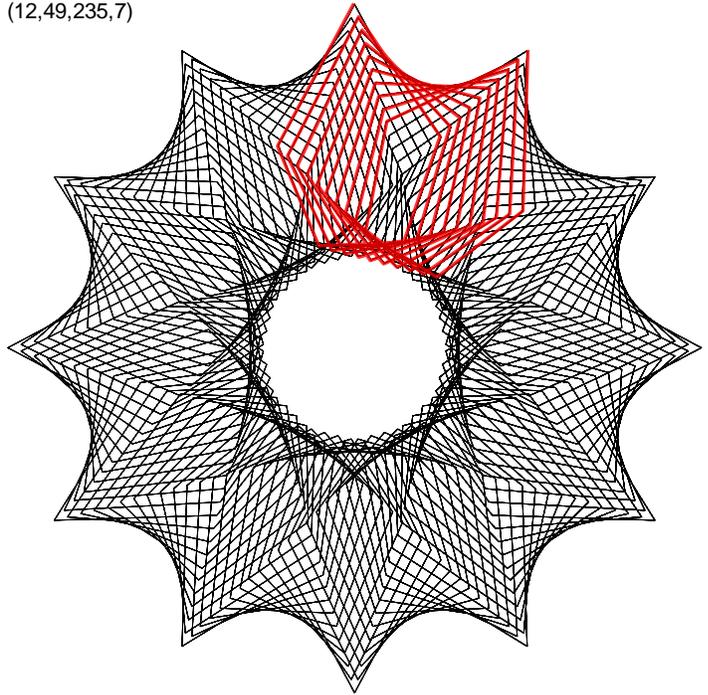
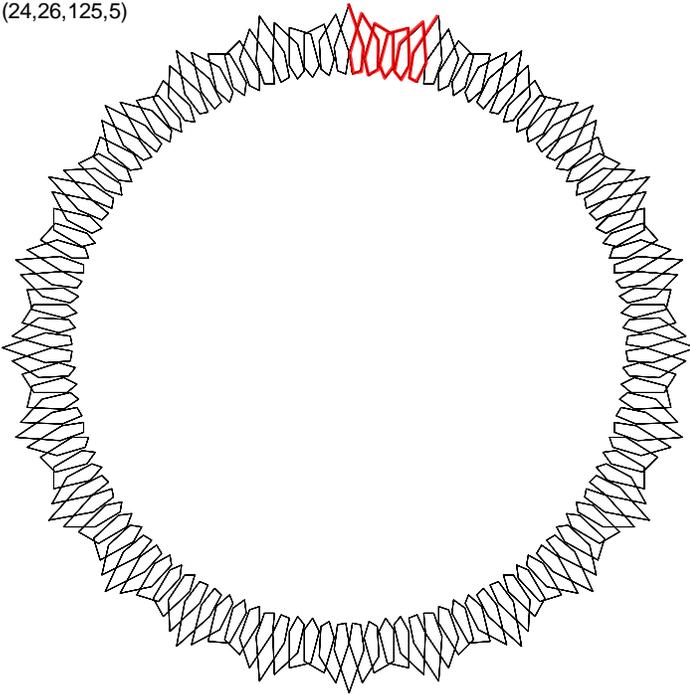
[Link to B \(5-gons\)](#)

[Alternative to B \(S = 51 5-gons\)](#)

(n, S, P, J)
(24,26,125,5)

624 lines (n, S, P, J)
(12,49,235,7)

588 lines



[Link to C \(5-grams\)](#)

[Alternative to C \(7-grams\)](#)

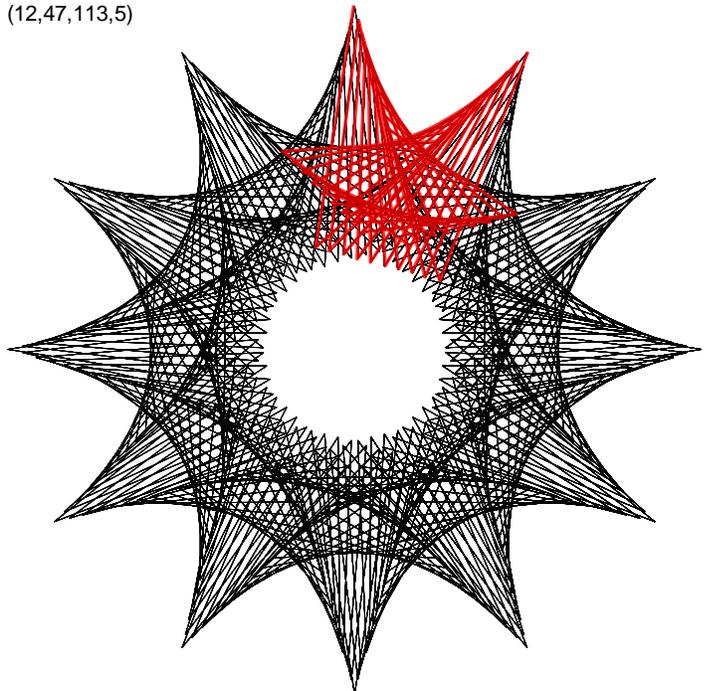
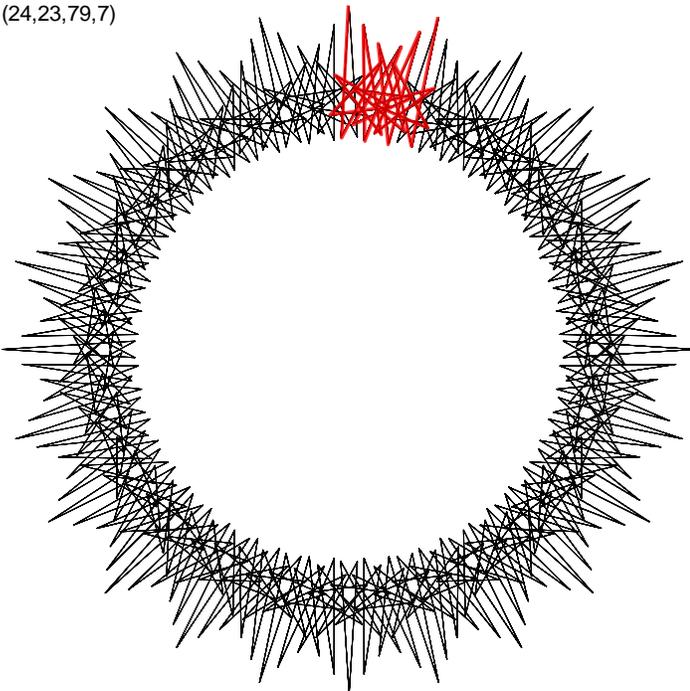
[Link to D \(5-grams\)](#)

[Alternative to D \(7-gram\)](#)

(n, S, P, J)
(24,23,79,7)

552 lines (n, S, P, J)
(12,47,113,5)

564 lines



A note to p. 1. Alternative versions of first two images were obtained by adding or subtracting 60 to P and changing S by 1. This “opened” or closed” the triangle in the first instance, and turned the pentagon into a pentagram in second instance.